

Notice of Allowability

Application No.

10/707,294

Examiner

Jacques M Saint-Surin

Applicant(s)

CHEN ET AL.

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application of 12/03/03.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ The drawings filed on 13 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 12/03/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance:

Nagasawa et al. (US Patent 6,145,382) discloses a method for measuring damping characteristics of a friction member include relatively pressing a first member as a friction member to be measured against a second member, for relatively sliding with respect to a second member and vibrating, measuring vibration states of the pressed first and second members, and measuring variations in the vibration states of the pressed first and second members and measuring damping characteristics of the friction member to be measured against vibrations by comparing damped amounts based on the variations in the vibration states of the first and second members. The above method and an apparatus therefor enable detailed evaluations of friction member having high performance.

Uhlig (US Patent 6,382,027) discloses a method for measuring the vibration damping of a part. The method comprises the steps of vibrating the part with a contactless vibrator, measuring the output vibrations of the part with a contactless measuring device, determining an input frequency for testing the part, the input frequency being a frequency which uses the smallest gain to cause the part to produce vibrations having an output amplitude equal to a predetermined target amplitude, providing an input to the part with the contactless vibrator such that the part vibrates at the input frequency, simultaneously interrupting the input and using the contactless measuring device to measure as a function of time an output amplitude of vibrations in the part, and determining the rate at which the vibrations in the part are damped.

Uhlig (US Patent 6,370,958) discloses the vibration damping capability of a test part can be computed by vibrating the test part at different frequencies, and measuring the amplitude of the vibrational wave generated in the test part at each input frequency. The test data can be used to generate a measurement curve plotting vibration amplitude against frequency.

Wortge et al. (US Patent 6,386,042) discloses a method and an apparatus are provided for contact-free optical displacement and/or vibration measurement of an object, in which the actual positions of the plurality of measurement points are selected and recorded. The display positions of the plurality of measurement points are displayed in the output unit based on a stored or video image of the object. Errors in congruency between the actual positions of the plurality of measurement points and the display positions of the plurality of measurement points are corrected.

None of the above references discloses a method for determining the vibration damping characteristics of an automotive brake structure, comprising "measuring the vibration response of said brake structure during application of said random-frequency excitation, including responsive vibration occurring at not less than one modal frequency; applying a confined bandwidth random-frequency vibratory excitation to said brake structure, with said confined bandwidth being selected to correspond to said at least one modal frequency; measuring the vibration response of said brake structure during application of said confined bandwidth signal; and using the measured vibration response of said brake structure to said confined bandwidth signal to calculate the damping value of said brake structure" as recited in claim 1. These limitations are neither taught nor made obvious by the prior art of record.


Art Unit: 2856

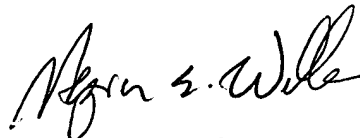
2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jacques M. Saint-Surin
September 30, 2004


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800